## Leak Detection Program

**API RP 1175 Road Map**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEP 1</strong></td>
<td>IDENTIFY</td>
</tr>
<tr>
<td>• Operators develop an understanding of the scope of API RP 1175.</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 2</strong></td>
<td>PLAN</td>
</tr>
<tr>
<td>• Analyze gaps and develop corrective action plans.</td>
<td></td>
</tr>
<tr>
<td>• It should be recognized that operator will take this step at the appropriate pace for them.</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 3</strong></td>
<td>EXECUTE</td>
</tr>
<tr>
<td>• Visible commitment from leadership supporting deployment.</td>
<td></td>
</tr>
<tr>
<td>• Implement and communicate plan.</td>
<td></td>
</tr>
<tr>
<td>• Changes to leak detection program have been documented.</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 4</strong></td>
<td>EVALUATE</td>
</tr>
<tr>
<td>• Performance is being assessed using metrics developed by company with methods laid out in API RP 1175.</td>
<td></td>
</tr>
<tr>
<td>• Operator evaluates performance against industry benchmarking results.</td>
<td></td>
</tr>
<tr>
<td><strong>STEP 5</strong></td>
<td>SUSTAIN</td>
</tr>
<tr>
<td>• There is an ongoing program review process and continuous improvement culture.</td>
<td></td>
</tr>
</tbody>
</table>

## Implementation Road Map

- **API RP 1175 Gap Assessment Tool**
- **Leak Detection Strategy Document**
- **Implementation Road Map**
- **Industry Benchmarking Results**
- **Third-Party Consulting Support**
- **API RP 1175 Peer-to-Peer Sharing**

An operator’s Pipeline Safety Management System (Pipeline SMS), as detailed in API RP 1173, serves as the umbrella framework for specific programs, including leak detection, ultimately forming an integrated approach to safety through assessment, implementation and evaluation metrics.
Leak Detection Program
API RP 1175 Road Map

List Elements
- Leak detection culture and strategy
- Selection of leak detection methods
- Performance targets
- Metrics
- KPIs
- Testing
- Control Center procedures for recognition and response
- Alarm management
- Roles, responsibilities, and training
- Reliability centered maintenance for leak detection equipment
- Overall performance evaluation of the LDP
- Management of change
- Improvement process(es)

GETTING STARTED
- Understand RP 1175
- Obtain management buy in
- Commit to RP 1175 implementation see www.bit.ly/apirp1175

GAP ANALYSIS TOOL
- Gap analysis tool to compare an operator's existing system to the requirements of API RP 1175
- Documents action plans and responsibilities to close gaps see Gap Assessment Tool Template at www.bit.ly/apirp1175relevantdocs

STRATEGY DOCUMENT
- Establishes how the operator meets the RP requirements.
- KPIs for leak detection program and leak detection systems.
- Management supports, approves, and endorses.

ESTABLISHED PROGRAM

PEER-TO-PEER SHARING CAN BE CONDUCTED AT ANYTIME

INDUSTRY BENCHMARKING
- Review aggregated industry benchmark results

For more information on API RP 1175 tools or questions regarding API RP 1175 or implementing an effective leak detection program, please see www.pipelinesms.org/index.php/moresystems/leak-detection or contact API at PipelineLDP@api.org.